

## 9-1 GCSE Maths (higher) Topic Checklist

*Made for The Student Room*

Number	Algebra and graphs	Geometry	Statistics and probability
<input type="checkbox"/> Basic arithmetic	<input type="checkbox"/> Algebraic manipulation	<input type="checkbox"/> Angles and parallel lines	<input type="checkbox"/> Interpreting and representing data
<input type="checkbox"/> Negative numbers	<input type="checkbox"/> Forming and solving equations	<input type="checkbox"/> Area and perimeter	<input type="checkbox"/> Stem and leaf diagrams
<input type="checkbox"/> Powers and roots	<input type="checkbox"/> Expanding and factorising	<input type="checkbox"/> Volume	<input type="checkbox"/> Sampling
<input type="checkbox"/> Primes, factors and multiples	<input type="checkbox"/> Expanding three brackets	<input type="checkbox"/> Circles, arcs and sectors	<input type="checkbox"/> Averages
<input type="checkbox"/> Order of operations (BIDMAS)	<input type="checkbox"/> Linear simultaneous equations	<input type="checkbox"/> Polygons	<input type="checkbox"/> Quartiles and box plots
<input type="checkbox"/> HCF/LCM	<input type="checkbox"/> Quadratic simultaneous equations	<input type="checkbox"/> Congruence	<input type="checkbox"/> Cumulative frequency
<input type="checkbox"/> Use of a calculator	<input type="checkbox"/> Solving simultaneous equations graphically	<input type="checkbox"/> Similar shapes : length	<input type="checkbox"/> Histograms
<input type="checkbox"/> Working with decimals	<input type="checkbox"/> Factorising/solving quadratic equations	<input type="checkbox"/> Similar shapes : area and volume	<input type="checkbox"/> Scatter diagrams and correlation
<input type="checkbox"/> Working with fractions	<input type="checkbox"/> Factorising harder quadratics	<input type="checkbox"/> Pythagoras' Theorem	<input type="checkbox"/> Probability
<input type="checkbox"/> Working with percentages	<input type="checkbox"/> Completing the square (and using this form to find turning points and solve equations)	<input type="checkbox"/> SOHCAHTOA	<input type="checkbox"/> Relative frequency / experimental probability
<input type="checkbox"/> Reverse percentages	<input type="checkbox"/> The quadratic formula	<input type="checkbox"/> Sine rule / cosine rule / area formula	<input type="checkbox"/> Tree diagrams
<input type="checkbox"/> Growth and decay including simple/compound interest	<input type="checkbox"/> Changing the subject of a formula	<input type="checkbox"/> Exact trigonometry values	<input type="checkbox"/> Sets and venn diagrams
<input type="checkbox"/> Working with ratios	<input type="checkbox"/> Algebraic fractions	<input type="checkbox"/> 3D trigonometry	<input type="checkbox"/> Conditional/"Given that" probability
<input type="checkbox"/> Direct/inverse proportion	<input type="checkbox"/> Functions	<input type="checkbox"/> Transformations (rotations, translations, enlargements)	<input type="checkbox"/> Frequency trees
<input type="checkbox"/> Indices	<input type="checkbox"/> Proof	<input type="checkbox"/> Successive transformations and invariance	
<input type="checkbox"/> Standard units	<input type="checkbox"/> Iteration	<input type="checkbox"/> Bearings	
<input type="checkbox"/> Compound units	<input type="checkbox"/> Straight line graphs	<input type="checkbox"/> Loci and constructions	
<input type="checkbox"/> Converting area and volume units	<input type="checkbox"/> Quadratic and cubic graphs	<input type="checkbox"/> Circle theorems	
<input type="checkbox"/> Simplifying/rationalising surds	<input type="checkbox"/> Trig and exponential graphs	<input type="checkbox"/> Proofs of circle theorems	
<input type="checkbox"/> Standard form	<input type="checkbox"/> Reciprocal graphs	<input type="checkbox"/> Plans and elevations	
<input type="checkbox"/> Estimation	<input type="checkbox"/> Equation of a circle	<input type="checkbox"/> Vectors	
<input type="checkbox"/> Estimate powers and roots	<input type="checkbox"/> Transformations of functions		
<input type="checkbox"/> Capture/recapture questions	<input type="checkbox"/> Real life graphs		
<input type="checkbox"/> Counting combinations	<input type="checkbox"/> Speed/time graphs		
<input type="checkbox"/> Upper/lower bounds, error intervals, giving answers to "an appropriate degree of accuracy"	<input type="checkbox"/> Rates of change / gradients		
<input type="checkbox"/> Recurring decimals	<input type="checkbox"/> Estimating areas under graphs		
	<input type="checkbox"/> Solving linear inequalities		
	<input type="checkbox"/> Linear inequalities on a graph		
	<input type="checkbox"/> Solving quadratic inequalities		
	<input type="checkbox"/> nth term of arithmetic/Fibonacci sequences		
	<input type="checkbox"/> Quadratic sequences		
	<input type="checkbox"/> Recurrence relations		
	<input type="checkbox"/> Geometric progressions / exponential growth and decay		